## HISTORY AND PROGRESS OF ANES-THESIA IN CALIFORNIA\*

CHAIRMAN'S ADDRESS: SECTION ON ANESTHESIOLOGY

By R. F. HASTREITER, M. D., Los Angeles (From the Methodist Hospital, Los Angeles.)

Five short years ago, a group of enthusiastic medical anesthetists, recognizing the deplorable condition of anesthesiology, as then practiced by physicians and laymen alike, and realizing the necessity of proper development of this important branch of medicine, met and organized the Southern California Society of Anesthetists, which, together with the active society of Northern California, was destined to play an exceedingly important part in the advancement of the science of anesthesia within the next few years.

To restore order out of the chaotic condition in which anesthesiology found itself and to overcome the stubborn opposition against proper development of the subject as a medical specialty evinced on every hand by surgeons, seemed a herculean task, but the "Fates" were propitious, and history repeated itself by alloting to us a leader in the person of Doctor Eleanor Seymour, through whose untiring efforts and devotion to this great cause, revolutionary changes were enacted, and anesthesiology, after years of dormancy, began to receive the attention it so richly deserved.

The latter part of 1919 found the campaign for improvement, of what was to become the specialty of anesthesia, well under way, and a resolution was unanimously passed by the Los Angeles County Medical Association favoring the limitation of the practice of anesthesiology to regularly licensed physicians and surgeons holding the degree of doctor of medicine from a good medical school.

San Francisco County had pioneered this work as early as 1916, but apparently no attempt was made by them at that time to elicit the assistance of other county units.

During the first half of 1920, all of the county societies were approached on the subject, at the same time being apprised of an interpretation of the Medical Practice Act, rendered by the chief counsel of the State Board of Medical Examiners, which forbade the administration of an anesthetic by a layman, with the result that the House of Delegates of the California Medical Association, on May 12, unanimously adopted a resolution embodying the following provisions:

- 1. That the administration of an anesthetic is always the function of a legally and educationally qualified medical practitioner.
- 2. That such administration is best performed by physicians specially trained, or who have made a specialty of the subject.
- 3. That, wherever available, hospitals and public institutions where anesthetics are administered should employ a physician as an anesthetist.
- 4. That the society condemns under all circumstances the training and qualifications of lay-persons as anesthetists.

5. That no hospital shall be deemed to have acceptable standards which charges a fee for an anesthetic unless such an anesthetic has been administered by a legally qualified physician.

Coincident with this, on June 30 the Southern California Dental Association went on record as favoring the limitation of the practice of anesthesia to regularly licensed physicians and dentists.

In April, 1921, through the support of the League for the Conservation of Public Health, an amendment to the Medical Practice Act, adding anesthesiology, hours thirty-two, as a requirement for a physicians and surgeons' certificate, was passed by the state legislature, and became a law by the signature of the governor of the state of California.

Heartly Peart, counsel, and Doctor W. E. Musgrave, then secretary of the society, were largely instrumental in bringing this about, and to them all anesthetists owe a debt of greatest gratitude.

The year 1921 witnessed most remarkable progress, among the more important being the granting to anesthetists of a section on anesthesiology by the California Medical Association; a branch to the Southern California Society of Anesthetists by the Los Angeles County Medical Association; the organization of the Pacific Coast Association of Anesthetists, embracing the states of Washington, Oregon, Utah, Arizona, Nevada, and California, and the adoption of proper anesthetic record charts by most of the Class A hospitals of the state, in line with their efforts toward the proper advancement of medicine and surgery.

The achievements in California have been of such a high order, and their effect of such national importance, that the necessary inspiration and enthusiasm have been transmitted broadcast for the formation of such important regional societies as the Canadian, the Mid-Western, and the Southern Society of Anesthetists, whose work has ably supplemented that inaugurated by the anesthetists of the Pacific Coast.

During the formative period of our specialty, California was exceptionally fortunate in having added to her productive citizenry a chemical engineer of international reputation, Doctor Donald Baxter, who, recognizing the absolute necessity of a chemically pure nitrous oxid and oxygen, began its manufacture in a modest way in 1921, and since that time has produced a gas of such high standard and purity, that today it has been practically universally accepted by all the anesthetists of the Pacific Coast

Many of the excellent results in hazardous risks have been directly attributable to this finished product, and the gratitude of the profession to the man who has made such excellent work possible is deeper than any words of praise can express.

That the humble efforts of the trained medical anesthetist are appreciated, and anesthesia, as practiced by him, has become a true and important specialty is best evidenced by the fact that all accredited hospitals now have him as an official member of the staff, and the surgeon, recognizing his ability, is more and more coming to look upon him (the anesthetist) as a consultant before and after operation.

That the anesthetists of California have brought

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to full fruition the high standards set by them a few years ago is now no longer a matter of conjecture, and to see that the advancement so auspiciously begun should be continued unsullied in the future should not only be the desire, but also the duty of all anesthetists who have the best interest of our beloved specialty at heart.

718 Brockman Building.

Mercury Poisoning as an Industrial Medicine Problem—"Daily exposure to an atmosphere containing as small a quantity as 0.02 milligram of mercury per cubic foot of air results in signs and symptoms of poisoning," says J. A. Turner (Public Health Reports). "The histories indicate that daily exposure must continue for two to three months, or more, before symtoms appear.

"It is estimated that in exposure to the above quantities of mercury for three to five hours daily there is a total daily absorption of mercury ranging from 0.771 to 1.285 milligrams, according to the duration of exposure.

"Mercury is volatilized from both the 10 to 20 kilowatt induction furnaces during their operation. This mercury vapor is disseminated throughout the room and recondensed to the metallic form. This is evidenced by analysis of dust samples obtained at various distances from the furnaces, which showed the presence of from 1 to 3 per cent of mercury.

"The objective symptoms of chronic mercurialism are manifested by a copper-colored discoloration of the mucous membrane of the pharynx, the pillars of the fauces, and the gums. This discoloration was constant in all cases and should not be confused with infective inflammatory processes, which it somewhat resembles. The gums are swollen, and there is enlargement of the capillaries. Superficial erosions appear upon the mucous membrane of the gums, and upon the buccal mucous membrane in the vicinity of the upper molar teeth. Perialveolar abscesses frequently occur and cause considerable discomfort. Occasionally there is an appreciable increase in the flow of saliva. Urine analysis and differential blood counts show the urine and the blood to be unaffected by the mercury absorbed. Subjective symptoms are characterized by tenderness of the gums and hypersensitiveness of the teeth, particularly those containing amalgam fillings. Activity of intestinal peristalsis is slightly increased, occasionally developing into mild attacks of diarrhea. Obstinate constipation is developed during absence from the laboratory for one to two weeks. Gastro-intestinal disturbance is manifested by pain due to accumulation of gas; there is often distention and feeling of weight in the hypogastric and iliac regions. As mentioned, there are occasional attacks of diarrhea. Shifting neuralgic pains are occasionally felt in the various joints and in

"The problem of the prevention of mercurial poisoning in laboratories and industrial establishments can best be solved by inclosing all apparatus in which mercury is used and by conveying the fumes away from the worker's face so that it will be impossible for him to inhale them."

State Homeopathic Medical Society Holds Annual Meeting and Elects New Officers — The California State Homeopathic Medical Society, in annual session at Riverside, May 14, elected officers as follows: C. B. Pinkham, San Francisco, president; E. P. Clark, Los Angeles, vice-president; Lillian Boldemann, San Francisco, second vice-president; Guy E. Manning, San Francisco, secretary-treasurer, and Leroy Bailey, H. L. Shepherd, Los Angeles, and F. H. Cookinham, Joseph Visalli and C. B. Pinkham, San Francisco, directors.

## **EDITORIALS**

## FANTASTIC SCHEMES FOR FORMULARIZING AND SOCIALIZING MEDICINE

(Read, approved and ordered published by the Executive Committee of the C. M. A.)

Physicians of Alameda County have been growing more and more restive over the elaborate methods developing there, which are calculated not only to produce a state of socialized medicine, but to reduce this great science to a formula and, in some instances, a code formula at that.

We are convinced that physicians, as well as other thinking citizens, have reason to be disturbed. This is not in the physicians' personal selfish interests, but in the name of the unknowing public, and particularly of the sick of the community. From a personal standpoint, more and more physicians are finding more and more to do in Oakland, a condition that is likely to expand rather than decrease, and for very obvious reasons. Friends of better medicine, including physicians, nurses, teachers, and private citizens, have been supplying CALIFORNIA AND WESTERN MEDICINE with depressing data for some time about a scheme of things medical that should be labeled for what they are.

First, we will call attention to what its sponsors proudly designate the "Oakland method" of handling the health of school children. They do it by a "team method" to which there is no insufferable objection, provided the team is wisely selected, given all necessary facilities for good diagnostic work and sufficient time to do it in. The teams who are diagnosing diseases and otherwise practicing medicine among school children consist, according to a published statement, of:

"One doctor.
Four nurses.
One physical education director.
One optometrist.
Fourteen trained science pupils."

It is reported that one of these "teams" examine from 350 to 400 children a day, and record their findings. Just think of it! Imagine one doctor adequately examining even one-fifth of that number of persons in one day. Yet, it is findings like these upon which parents rely to safeguard the health and lives of their children. No wonder competent physicians are saying that some of their little patients about whose future they are most concerned are rated by school authorities as perfect, and others with definite diseases are diagnosed "undernutrition."

After one of these teams—and there are three of them—diagnoses the diseases and defects of 400 children in a portion of a day, the diseases and defects are put together in code on assorted colored school cards. For the information of the doctors? No. For the information of the teachers so that "the pupils' health record is always available to the teacher."

It is said that these non-medical persons are not practicing medicine within the meaning of the law